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EXAMINER	
MILIA, MARK R	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
12/13/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/730,935	SUGIMOTO ET AL.	
	Examiner	Art Unit	
	Mark R. Milia	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16-35 and 37-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16-35 and 37-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/18/10 has been entered. Currently, claims 1-14, 16-35, and 37-40 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-14, 16-35, and 37-40 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 8, 16, 18, 27, and 37 recite “receiving a document file that has not been converted into Page Description Language (PDL) format” but in dependent claims 7, 14, 17, 26, 35, and 38 recite “wherein said document file is a PDF file. It is known in the art that a PDF file is a type of Page Description Language (PDL)

and therefore claims 1-14, 16-35, and 37-40 are indefinite because if the document file is a PDF file then by definition it is in PDL format and reception of the document file must bee in PDL format and the claims are contradictory. The specification is further evidence that the document file is meant to be a PDF file as the specification discusses PDF direct printing and the utilization of the PDF format to start the printing process without having to receive the entire document. The claims must be interpreted in light of the specification and therefore the claims can not be interpreted as receiving a document file that has not been converted into a PDL format when it is clear from the specification that the document file is a PDF file. The Examiner suggests clarifying the amendments to independent claims 1, 8, 16, 18, 27, and 37 in light of the statements above.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 8-14, 16-17, 27-35, and 37-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 8-14 and 27-35 are drawn to such a computer readable medium that covers both transitory and non-transitory embodiments but may be amended to narrow the claim to cover only statutory embodiments by adding the limitation "non-transitory" to the claim.

The broadest reasonable interpretation of a claim drawn to a computer readable medium covers forms of non-transitory tangible media and transitory propagating signals per se in view of the ordinary and customary meaning of computer readable media. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal per se, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See In re Nuijten, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101, Aug. 24, 2009; p. 2.

Claims 16-17 and 37-38 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. The Federal Circuit[1], relying upon Supreme Court precedent[2], has indicated that a statutory "process" under 35 U.S.C. 101 must (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. This is referred to as the "machine or transformation test", whereby the recitation of a particular machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. (See Benson, 409 U.S. at 71-72), and the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity (See Flook, 437 U.S. at 590"). While the instant claim(s) recite(s) a series of steps or acts to be performed, the claim(s) neither transform(s) an article nor are positively tied to a particular machine that accomplishes the claimed method steps, and therefore do not qualify as a statutory

[1] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

process. In order for a process to be "tied" to another statutory category, the structure of another statutory category should be positively recited in a step or steps significant to the basic inventive concept, and NOT just in association with statements of intended use or purpose, insignificant pre or post solution activity, or implicitly. Consider claims 16 and 37. The claim is not tied to a particular machine because the structure of another statutory category is not positively recited in a step significant to the basic inventive concept, and the steps of the claim could reasonably be construed as being performed manually. The claim also does not satisfy the transformation test, as it does not transform a particular article to a different state or thing. No physical transformation is claimed. Additionally: 1) the data is not required to represent a real world/physical object; 2) there is no external, non-data representation of the physical object represented by the modified data. The dependent claims do not add anything which would cause the claims to become statutory. In order to obviate this rejection, the Examiner suggests either one of the following options: 1) include language in the claim which requires meaningful and significant steps be performed by a particular machine (i.e., not a generic "machine" or "device); or, 2) require that the data or image represent a real world/physical object, and include an additional step which requires depiction of a non-data representation (this could be a visual depiction) of the resulting data. Any language added to the claims must find support in the original disclosure, in order to avoid a rejection under 35 U.S.C. 112, 1st paragraph (new matter).

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[2] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk*

Response to Arguments

6. Applicant's arguments filed 10/18/10 have been fully considered but they are not persuasive.

The applicant asserts that the combination of Hohensee (US 6,407,821) and Ackerman (US 2002/0171856) does not disclose receives a document file that has not been converted into Page Description Language (PDL) format, as recited in claims 1, 8, 16, 18, 27, and 37. The Examiner respectfully disagrees as the combination of Hohensee and Ackerman does disclose such features. Particularly, Hohensee shows a document to be printed produced by an application program on a client computer that is transmitted to a print server and then the document to be printed is sent to the printer in page units, the print server being an external device (column 4 line 61-column 5 line 39, column 6 lines 18-34, and column 11 lines 22-35). Hohensee further states that the document can be a PDF document and as such is analyzed and processed in a specific way, as is known in the art (column 9 lines 26-51). Ackerman describes partial page buffering and real time communication of print data to a print engine. Print data is actively received by the printer from an external input device **24** via input port **18** and a code sniffer buffer **33** analyzes the packets of print data, the print data being in an unconverted RAW format (paragraphs 38 and 41). Ackerman further states that the document can be a PDF document (paragraph 61). Since the printer is actively receiving print data from the input device **24** and transferring print data to the print

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v. Benson, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

engine in real time it is quite obvious that printing is started prior to receiving the entire document from an external device. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the starting of printing of unconverted document data prior to receiving the entire document file, as described by Ackerman, with the system of Hohensee to provide direct IP printing while limiting the amount of memory necessary for execution thereby reducing cost and increasing processing speed. The Examiner has mentioned above that a PDF is a type of PDL, however, if for some reason the applicant disagrees with this statement, Ackerman states that emulators other than Postscript emulators, such as for PDF, can be used while including the same principles of the invention and Hohensee deals with PDF documents. Therefore, the combination of Hohensee and Ackerman still render the claims obvious.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-3, 5-14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohensee (US 6,407,821) in view of Ackerman et al. (US 2002/0171856).

Regarding claims 1, 8, and 16, Hohensee discloses an image forming device, program, and method for receiving a document file that has not been converted into Page Description Language (PDL) format and forming images of said document file, wherein said document file contains a plurality of pages and a plurality of unconverted objects for displaying a part or all of the contents of each page of the document and being capable of lining up in the file regardless of the order of said contents displayed in said document, comprising: a receiving unit for successively receiving unconverted constituent data of said document file from an external device (see Fig. 8 **814**, column 6 lines 18-34, and column 11 lines 22-35, data to be printed, such as a PDF document, is received in page units by a print controller from a client computer by way of a print server, both external devices), a storing unit for successively storing said objects contained in said unconverted constituent data received by said receiving unit (see Fig. 8 **820** and column 11 lines 36-52, memory **820** stored resource data, which is information associated with PDF objects), a judging unit for judging whether all objects necessary for displaying a specific page out of the plurality of objects included in the document file are stored in said storing unit (see column 9 line 26-column 10 lines 30, column 5 lines 36-50, column 6 lines 18-34, and column 8 lines 26-36, and column 11 lines 36-52, reference states that a PDF print object **600**, as shown in Fig. 6, is analyzed and resources such as fonts and images are referenced to equivalent resources associated with AFP protocol, which is used to print the data, and the resources are stored in a resource database **628**, the reference further states that the printer has a control unit and a memory, the memory is used to store resources data, such as fonts

and images. A print server sends data in units of pages to the printer by means of an IPDS data stream in which PDF data is carried in containers, the containers having both formatting control data and printable data. Reference further states that two-way communication is carried out between the print server and the printer. The print server can query the printer to determine whether the printer already has a particular resource, such as a font, the printer responds as to whether it already has the resource and if the printer does not then the print server can retrieve the font from the resource database and send it to the printer memory. Each page is processed to determine if all the resources needed to print the page are present and once the resources are all present then the PDF data can be rasterized and merged with other print data, such as page body data, and printed out), and an image forming unit for forming images of said specific page of the document file having been received from the external device and regardless of whether the unconverted objects are arranged according to page number of the document file when it is judged by said judging unit that all objects necessary for displaying said specific page are stored in said storing unit regardless of whether the plurality of objects included in the document file have been stored in said storing unit or not (see Fig. 8 printer **224**, column 9 line 26-column 10 line 30, and column 11 lines 3-52, reference shows that duplicate resources are not stored and instead when a particular object is to be used on a plurality of pages the object is reused, each page is processed to determine if all the resources needed to print the page are present in the printer memory and once the resources are all present then the PDF data can be rasterized and merged with other print data, such as page body data, and printed out).

Hohensee does not disclose expressly an image forming unit for forming images of said specific page before all of the unconverted constituent data of the document file have been received at the receiving unit.

Ackerman discloses an image forming unit for forming images of said specific page before all of the unconverted constituent data of the document file have been received at the receiving unit (see paragraphs 37-38, 41, 43, 61, and 67, unconverted PostScript of PDF data is received by printer **10** and interpreted and buffered on a per page basis or even less than a full page basis, then the data is rasterized and communicated to the print engine in real time).

Hohensee & Ackerman are combinable because they are from the same field of endeavor, printing of document data such as PS or PDF.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the starting of printing of unconverted document data prior to receiving the entire document file, as described by Ackerman, with the system of Hohensee.

The suggestion/motivation for doing so would have been to provide direct IP printing while limiting the amount of memory necessary for execution thereby reducing cost and increasing processing speed.

Therefore, it would have been obvious to combine Ackerman with Hohensee to obtain the invention as specified in claims 1, 8, and 16.

Regarding claims 2 and 9, Hohensee further discloses wherein said specific page is a head page among pages whose images have not been formed (see Fig. 6 and column 2 lines 5-25).

Regarding claims 3 and 10, Hohensee further discloses a deleting unit for deleting a specific object which has already been stored in said storing unit (see Figs. 2 and 6 and column 9 lines 58-63).

Regarding claims 5 and 12, Hohensee further discloses wherein said specific object is an object which is not necessary for displaying other pages whose images have not been formed among objects used for displaying pages whose images have been formed (see Figs. 2 and 6 and column 9 lines 58-63).

Regarding claims 6 and 13, Hohensee further discloses a transmitting unit for transmitting a transmission request concerning the deleted object when an object for displaying said specific page is deleted from said storing unit by said deleting unit (see column 5 lines 36-51).

Regarding claims 7, 14, and 17, Hohensee further discloses wherein said document file is a PDF file (see Fig. 6 and column 9 lines 26-42).

9. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohensee and Ackerman as applied to claims 3 and 10 above, and further in view of Abe (JP 09-174955), as cited on the IDS dated 6/20/07. Reference will be made to a computer translation which was furnished with a previous Office Action.

Hohensee and Ackerman do not disclose expressly a second judging unit for judging whether the amount of usage of said storing unit has exceeded a prescribed limit of usage, wherein said deleting unit is to delete said specific object from said storing unit when it is judged by said second judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage.

Abe discloses a second judging unit for judging whether the amount of usage of said storing unit has exceeded a prescribed limit of usage, wherein said deleting unit is to delete said specific object from said storing unit when it is judged by said second judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage (see paragraphs 13 and 14).

Hohensee, Ackerman & Abe are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the deletion of specific objects when a storage capacity threshold is reached, as described by Abe, with the system of Hohensee and Ackerman.

The suggestion/motivation for doing so would have been to allow systems with a relatively small memory capacity, which saves system costs, to be able to process and print PDF files.

Therefore, it would have been obvious to combine Abe with Hohensee and Ackerman to obtain the invention as specified in claims 4 and 11.

10. Claims 18-19, 23-28, 32-35, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohensee (US 6,407,821) in view of Abe (JP 09-174955).

Regarding claims 18, 27, and 37, Hohensee discloses an image forming device, program, and method for receiving a document file that has not been converted into Page Description Language (PDL) format and forming images of said document file, wherein said document file contains unconverted objects for displaying a part or ail of the contents of each page of the document and being capable of lining up in the file regardless of the order of said contents displayed in said document, comprising: a receiving unit for successively receiving constituent data of said document file from an external device (see Fig. 8 **814**, column 6 lines 18-34, and column 11 lines 22-35, data to be printed, such as a PDF document, is received in page units by a print controller from a client computer by way of a print server, both external devices), a storing unit for successively storing said objects contained in said constituent before the constituent data is converted into the PDL format (see Fig. 8 **820** and column 11 lines 36-52, memory **820** stored resource data, which is information associated with PDF objects), an image forming unit for forming images of said objects stored in said storing unit either singly or in combination of two or more of them of the document file having been received from the external device regardless of the order displayed in said document (see Fig. 8 printer **224**, column 9 line 26-column 10 line 30, and column 11 lines 3-52, reference shows that duplicate resources are not stored and instead when a particular object is to be used on a plurality of pages the object is reused, each page is processed to determine if all the resources needed to print the page are present in the printer

memory and once the resources are all present then the PDF data can be rasterized and merged with other print data, such as page body data, and printed out.

Hohensee does not disclose expressly a judging unit for judging whether an amount of usage of said storing unit has exceeded a prescribed limit of usage, an image forming unit for forming images of said objects stored in said storing unit either singly or in combination of two or more of them regardless of the order displayed in said document when it is judged by said judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage, an image forming unit for forming images of said specific page before all of the unconverted constituent data of the document file have been received at the receiving unit, and a deleting unit for deleting said object whose image has been formed by said image forming unit from said storing unit.

Abe discloses a judging unit for judging whether an amount of usage of said storing unit has exceeded a prescribed limit of usage (see paragraph 13), an image forming unit for forming images of said objects stored in said storing unit either singly or in combination of two or more of them regardless of the order displayed in said document when it is judged by said judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage (see paragraphs 13-14), and a deleting unit for deleting said object whose image has been formed by said image forming unit from said storing unit (see paragraph 14).

Ackerman discloses an image forming unit for forming images of said specific page before all of the unconverted constituent data of the document file have been

received at the receiving unit (see paragraphs 37-38, 41, 43, 61, and 67, unconverted PostScript of PDF data is received by printer **10** and interpreted and buffered on a per page basis or even less than a full page basis, then the data is rasterized and communicated to the print engine in real time).

Hohensee, Ackerman & Abe are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the deletion of specific objects when a storage capacity threshold is reached, as described by Abe, and the starting of printing of unconverted document data prior to receiving the entire document file, as described by Ackerman, with the system of Hohensee.

The suggestion/motivation for doing so would have been to provide direct IP printing while limiting the amount of memory necessary for execution thereby reducing cost and increasing processing speed to allow systems with a relatively small memory capacity to be able to process and print PDF files.

Therefore, it would have been obvious to combine Abe and Ackerman with Hohensee to obtain the invention as specified in claims 18, 27, and 37.

Regarding claims 19 and 28, Hohensee further discloses an identification name assigning unit for assigning identification names to said objects stored in said storing unit, wherein said image forming unit forms images of said objects together with the

identification names assigned to said objects by said identification name assigning unit (see Fig. 6, column 9 line 43-column 10 line 30, and column 11 lines 36-52).

Regarding claims 23 and 32, Abe further discloses a second judging unit for judging whether the amount of usage of said storing unit has exceeded a prescribed limit of usage, wherein said deleting unit is to delete said specific object from said storing unit when it is judged by said second judging unit that the amount of usage of said storing unit has exceeded the prescribed limit of usage (see paragraphs 13 and 14).

Regarding claims 24 and 33, Hohensee further discloses a deleting unit for deleting a specific object which has already been stored in said storing unit (see Figs. 2 and 6 and column 9 lines 58-63).

Regarding claims 25 and 34, Hohensee further discloses wherein said image forming unit forms images of said object in the order stored in said storing unit (see Fig. 6 and column 6 lines 18-34, PDF data is processed page by page and is transmitted to the printer on a page by page basis therefore it is processed and printed in such an order).

Regarding claims 26, 35, and 38, Hohensee further discloses wherein said document file is a PDF file (see Fig. 6 and column 9 lines 26-42).

11. Claims 20-22 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohensee, Ackerman and Abe as applied to claims 19 and 27 above, and further in view of Brown (US 2004/0216048).

Regarding claims 20 and 29, Hohensee discloses an identification name information generating unit for generating identification name information which is information on the identification names of said objects contained in each page of said document (see Fig. 6, column 9 line 43-column 10 line 30, and column 11 lines 36-52).

Hohensee, Ackerman and Abe do not disclose expressly wherein said image forming unit further forms images of the identification name information generated by said identification name information generating unit.

Brown discloses wherein said image forming unit further forms images of the identification name information generated by said identification name information generating unit (see paragraph 38).

Regarding claim 21 and 30, Hohensee, Ackerman and Abe do not disclose expressly wherein said identification name information contains table of contents which displays each page number of said document and the identification names of said objects contained in the page related to said page number.

Brown discloses wherein said identification name information contains table of contents which displays each page number of said document and the identification names of said objects contained in the page related to said page number (see paragraph 38).

Regarding claims 22 and 31, Hohensee, Ackerman and Abe do not disclose expressly wherein said identification name information contains page information which displays the identification names of said objects contained in a specific page of said document and the identification name of said specific page, and list of pages which

displays each page number of said document and the identification name of a page related to said page number.

Brown discloses wherein said identification name information contains page information which displays the identification names of said objects contained in a specific page of said document and the identification name of said specific page, and list of pages which displays each page number of said document and the identification name of a page related to said page number (see paragraph 38).

Hohensee, Ackerman, Abe, & Brown are combinable because they are from the same field of endeavor, printing of document data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the printing of a table of contents, which inherently contains page numbers associated with document data (object names), as described by Brown, with the system of Hohensee and Abe because table of contents are a well known and commonly used method of informing a user of the location of specific data to allow the user to easily locate desired information thereby saving the user time and effort.

Therefore, it would have been obvious to combine Brown with Hohensee, Ackerman and Abe to obtain the invention as specified in claims 20-22 and 29-31.

12. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohensee and Ackerman as applied to claim 1 above, and further in view of U.S. Patent Application Publication No. 20020067502 to Hansen.

Regarding claim 39, Hohensee discloses wherein the PDF document is output in a normal order, successively from the first page toward the last page of the document file and the image forming unit forms images of said specific pages (see column 9 line 25-column 10 line 30 and column 11 lines 3-52).

Hohensee and Ackerman does not disclose expressly judging unit further judges whether or not the document file will be output in a normal order, successively from the first page toward the last page of the document file, or out of order, and the image forming unit forms images of said specific page after an additional judgment by the judging unit of whether the document file will be output in a normal order or out of order.

Hansen discloses judging unit further judges whether or not the document file will be output in a normal order, successively from the first page toward the last page of the document file, or out of order, and the image forming unit forms images of said specific page after an additional judgment by the judging unit of whether the document file will be output in a normal order or out of order (see Figs. 4 and 5 and paragraphs 4 lines 1-5, 13, 25, 31-33, 42, and 50, an entire document or groups of pages of a PDF file can be selected for printing based on metatags placed on certain pages by a user).

Regarding claim 40, Hohensee discloses whether a head page of the document file is ready for output (see column 9 line 25-column 10 line 30 and column 11 lines 3-52, a PDF has a particular structure including a header, body, cross reference table, and trailer and as such when printing of a PDF document is performed the head page must be ready for output to output the document in the correct order).

Hohensee and Ackerman do not disclose expressly normal order is specified, the judging unit judges whether a head page of the document file is ready for output, and if the normal order is not specified, the images of the specific page are formed by the image forming unit regardless of whether the head page of the document file is ready for output.

Hansen discloses normal order is specified, the judging unit judges whether a head page of the document file is ready for output, and if the normal order is not specified, the images of the specific page are formed by the image forming unit regardless of whether the head page of the document file is ready for output (see Figs. 4 and 5 and paragraphs 4 lines 1-5, 13, 25, 31-33, 42, and 50, an entire document or groups of pages of a PDF file can be selected for printing based on metatags placed on certain pages by a user).

Hohensee, Ackerman & Hansen are combinable because they are from the same field of endeavor, printing of document data such as PS or PDF.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the selection of some or all of the pages of a PDF document for printing, as described by Hansen, with the system of Hohensee and Ackerman.

The suggestion/motivation for doing so would have been to provide an operator flexibility in printing a desire document by allowing the option to divert certain pages to one printing device while other pages go to a different printing device.

Therefore, it would have been obvious to combine Hansen with Hohensee and Ackerman to obtain the invention as specified in claims 39 and 40.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571)272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached at (571) 272-7437. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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